Recursive Estimation Of Linear Systems' Parameters Based On Cumulant Matching

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Summary

The problem of the estimation of the parameters of linear systems from noisy input-output measurements is considered. A third-order cumulant matching recursive algorithm is developed. The algorithm provides unbiased estimates of the parameters for a wide class of correlated noise corrupting both the input and the output measurements. A Monte Carlo type of simulation shows the consistency, and the superiority of the developed algorithm over the least-squares technique.

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